

CLAIMS

1. A silver solder or brazing alloy of the Ag-Cu-Zn family containing at least
5 55 wt % Ag and from 0.5 to 3 wt% Ge.
2. The alloy of claim 1, containing 1.5-2.5 wt % Ge.
3. The alloy of claim 1, containing about 2 wt % Ge.
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4. The alloy of any preceding claim, containing 55-77 wt % Ag, 10-30 wt% Cu
and 8-15 wt% Zn.
5. The alloy of any preceding claim, further comprising 0.05-0.4 wt % Si.
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6. The alloy of claim 5, comprising about 0.1 wt% Si.
7. The alloy of any preceding claim, further comprising 1-3 wt % Sn.
- 20 8. The alloy of claim 7, comprising about 2 wt % Sn.
9. The alloy of any preceding claim, containing 55-77 wt % Ag, 10-30 wt% Cu
and 8-15 wt% Zn, 2-2.5 wt % Ge and 0.05-0.4 wt % Si.
- 25 10. The alloy of any preceding claim, containing 55-77 wt % Ag, 10-30 wt% Cu
and 8-15 wt% Zn, 2-2.5 wt % Ge and 1-3 wt % Sn.
11. The alloy of any preceding claim, containing 55-77 wt % Ag, 10-30 wt% Cu
and 8-15 wt% Zn, 2-2.5 wt % Ge, 0.05-0.4 wt% Si and 1-3 wt % Sn.
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12. The alloy of any preceding claim, further comprising 0.1-0.3 wt % boron.

13. The alloy of any preceding claim having a solidus temperature of about 705°C and a liquidus temperature of about 725°C.

14. The alloy of any of claims 1-12, having a solidus temperature of about 720°C and a liquidus temperature of about 765°C.

15. The alloy of any of claims 1-12, having a solidus temperature of about 745°C and a liquidus temperature of about 778°C

16. Use of the alloy of any preceding claim to solder or braze a joint in silver.

17. Use of the alloy of any of claims 1-15 to solder or braze a joint in Sterling silver.

18. Use of the alloy of any of claims 1-15 to solder or braze a joint in silver of content about Ag 92.5 wt%, Cu 6.3 wt%, Ge 1.2 wt %.

19. An alloy according to any of claims 1-15, which is in the form of rod, strip or wire.

20. An alloy according to any of claims 1-15, which is in the form of paste.